

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An external cavity laser for oscillating laser light through a connector, comprising:

a fiber Bragg grating section formed of an optical fiber having a Bragg wavelength of light reflected by a grating adjusted to a given wavelength;

a laser light emitting device that generates light, and that is optically coupled to the fiber Bragg grating section to ensure input and output of the light, said laser light emitting device including a reflective surface for reflecting the generated light;

a cavity that is formed by the laser light emitting device and the grating, and that resonates the light between the reflective surface of the laser light emitting device and the grating, thereby oscillating a laser beam having a given oscillation wavelength;

a connector that outputs the light oscillated by the cavity, said connector being a first connector provided on an optical path extending from the laser light emitting device, and

intercepting means for intercepting waves reflected from the connector so that the external cavity laser maintains a relative intensity noise (RIN) less than -130 dB/Hz in a transmission band having frequencies equal to or less than 10GHz;

wherein the fiber Bragg grating section is located on the optical path between the laser light emitting device and the connector; and

wherein the intercepting means is located on the optical path between the fiber Bragg grating section and the connector.

Claim 2 (Canceled).

Claim 3 (Canceled).

Claim 4 (Currently Amended): The external cavity laser according to claim 1, ~~wherein~~
wherein the intercepting means comprises an isolator.

Claim 5 (Previously Presented): The external cavity laser according to claim 1,
wherein the intercepting means comprises a circulator.

Claim 6 (Previously Presented): The external cavity laser according to claim 1,
wherein the connector comprises a physical connector.

Claim 7 (Previously Presented): The external cavity laser according to claim 1,
wherein the connector comprises a superphysical connector.

Claim 8 (Previously Presented): The external cavity laser according to claim 1,
wherein the connector comprises an angled physical connector.

Claim 9 (Canceled).

Claim 10 (Previously Presented): The external cavity laser according to claim 1,
wherein a relative intensity of noise (RIN) less than -150 dB/Hz is maintained in a
transmission band having frequencies equal to or less than 10 GHz.

Claim 11 (Currently Amended): An external cavity laser for oscillating laser light
through a connector, comprising:

a fiber Bragg grating section formed of an optical fiber having a Bragg wavelength of
light reflected by a grating adjusted to a given wavelength;

a laser light emitting device that generates light, and that is optically coupled to the fiber Bragg grating section to ensure input and output of the light, said laser light emitting device including a reflective surface for reflecting the generated light;

a cavity that is formed by the laser light emitting device and the grating, and that resonates the light between the reflective surface of the laser light emitting device and the grating, thereby oscillating a laser beam having a given oscillation wavelength;

a connector that outputs the light oscillated by the cavity, said connector being a first connector provided on an optical path extending from the laser light emitting device; and

an intercepting element configured to intercept ~~for intercepting~~ waves reflected by the connector so that the external cavity laser maintains a relative intensity noise (RIN) less than -130 dB/Hz in a transmission band having frequencies equal to or less than 10GHz;

wherein the fiber Bragg grating section is located on the optical path between the laser light emitting device and the connector; and

wherein the intercepting element is located on the optical path between the fiber Bragg grating section and the connector.

Claim 12 (Previously Presented): The external cavity laser according to claim 11, wherein the intercepting element comprises an isolator.

Claim 13 (Previously Presented): The external cavity laser according to claim 11, wherein the intercepting element comprises a circulator.

Claim 14 (Previously Presented): The external cavity laser according to claim 11, wherein the connector comprises a physical connector.

Claim 15 (Previously Presented): The external cavity laser according to claim 11,
wherein the connector comprises a superphysical connector.

Claim 16 (Previously Presented): The external cavity laser according to claim 11,
wherein the connector comprises an angled physical connector.

Claim 17 (Canceled).

Claim 18 (Previously Presented): The external cavity laser according to claim 11,
wherein a relative intensity of noise (RIN) less than -150 dB/Hz is maintained in a
transmission band having frequencies equal to or less than 10 GHz.